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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,511	01/09/2002	Brian Bischoff	161022.90031	6606
26707	7590	03/09/2004	EXAMINER	
QUARLES & BRADY LLP RENAISSANCE ONE TWO NORTH CENTRAL AVENUE PHOENIX, AZ 85004-2391			OEN, WILLIAM L	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/042,511		BISCHOFF ET AL.	
	Examiner		Art Unit	
	William L Oen		2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47 and 64 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9,11-26,32-42 and 48-62 is/are rejected.
- 7) ☒ Claim(s) 3,4,7,8,10,27-31 and 43-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/11/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,2,5,6,9,11-26,32-42 and 48-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allington (U.S. Patent No. 5,755,559) in view of Silveri et al. (U.S. Patent No. 6,270,680).

Allington (U.S. Patent No. 5,755,559) teaches, for example in Figures 2, 7, & 18 and their corresponding descriptions in the specification, all of the essential features of the claimed adapter for coupling a sensor to a fluid system including an adapter block having a first fluid channel, a first input port and a first output port, a first spacer element coupled with the first output port, a retainer plate coupled to the adapter block, and a first diaphragm/membrane with a rim positioned within the retainer plate first opening between the adapter block and retainer plate. It is noted that Allington does not necessarily explicitly teach that the first diaphragm/membrane is held in place by a compression force exerted between the adapter block and retainer plate, and may not necessarily explicitly teach that the spacer has a second fluid channel.

Silveri et al. (U.S. Patent No. 6,270,680), in the same field of endeavor as Allington, teaches a diaphragm/membrane held in place by a compression force exerted between the adapter block and retainer plate, and at least inherently teaches a spacer element coupled with the first output port that has a second fluid channel. In view of these teachings by Silveri et al, and because it would have been a mere matter of simplification and expediency to have done so, it would have been obvious to one having ordinary skill in the art at the time of the invention to include in the adapter for coupling a sensor to a fluid system of Allington, the particular means of compression

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force holding of the adapter block and retainer plate, as well as the particular spacer element with fluid channel as taught by Silveri et al, if desired.

To have formed the first and/or second diaphragm of Allington as modified by Silveri et al of the same material as the adapter block, or of different materials is considered to have been a mere matter of obvious design choice clearly within the purview of one having ordinary skill in the art at the time of the invention, if desired. Similarly, to have formed the first and/or second membrane of Allington as modified by Silveri et al to have a plurality of convolutions and/or by integral machining or molding, and to have included an integral flow venturi in the bore of Allington as modified by Silveri et al, and to have included a pressure sensor per se as the sensor in the fluid line of Allington as modified by Silveri et al are all mere matters of obvious design choice clearly within the purview of one having ordinary skill in the art at the time of the invention, if desired. These are all merely obvious design choices because each respective feature is notoriously well known and widely applied in the fluid handling art.

Allowable Subject Matter

Claims 3,4,7,8,10,27-31 and 43-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 47 & 64 are allowed. The following is an examiner's statement of reasons for allowance:

The Prior Art does not fairly teach or suggest the *combination* of elements set forth in claims 47 and 64.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hakkenberg et al. (U.S. Patent No. 5,526,784) is cited as art of interest for its teaching of an adapter for coupling a sensor to a fluid line having many features salient to the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L Oen whose telephone number is 571-272-2186. The examiner can normally be reached on 10:30 am - 9:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William L Oen
Primary Examiner
Art Unit 2855

WL Oen
25 February 2004